CHAPTER 2

REVIEW OF LITERATURE

This chapter deals with the relevant Review of Literature. The analysis of review of literature is the main key focus of any type of research. It reveals the researcher to be aware of the past and current trends in any particular branch of research. The Research on Application of Total Quality Management in Engineering University Libraries has attracted the various scholars, researchers, information scientists and library personnel as a whole. They have contributed to various research outputs and an analysis of these research outputs and an analysis of these research findings enables the researcher to identify the research gap. Hence, the scholar identified this and concentrated on this research.

Anaba A. Alemna, (1990)¹ has explained about the importance of Marketing and Total Quality Management in libraries in this paper. The writer is of the view that the conditions which challenged libraries in developed countries to adopt Marketing and Total Quality Management strategies are very much prevalent in Ghana at present.

Wenda Webstar Fischer, (1992)² explained that the Total Quality Management in a hospital library identifying service benchmarks Explains about a survey conducted in a hospital regarding the benchmark, it states that it provided internal baselines data and identified important areas for further internal investigation.

Donna K. Fitch, Jean Thomason, and Elizabeth Crabtree Wells, (1993)³ have elaborated that the Turning the Library Upside Down: Reorganization Using Total
Quality Management Principles. Total quality management, with its emphasis on teamwork, service, and empowerment, complements librarians' commitment to service excellence. The concepts and techniques of TQM can guide librarians in examining processes and using human resources to their fullest potentials. Professional and support staff must be empowered to participate in planning and changing their library to produce a responsive, customer-centered environment.

Gwen Arthur, (1994) has discussed that most of the service quality programs can be grouped into two generic approaches: the customer handling approach which emphasis developing and improving the customer service skills of front-line service personnel and the blue printing approach which focuses on addressing the inadequacies of service delivery systems. All library administrators concerned with quality also need to examine the service delivery systems (such as cataloguing and interlibrary loan) upon which their frontline workers depend they should not underestimate the importance of the service-training component.

Doreen Parker, (1994) discussed that the Total quality service at the Victoria University of Technology library. The Victoria University of Technology Library has implemented Total Quality Service (TQS) Program. The initial client market research, strategy, formulation and staff training have been completed, process improvement procedures established and mechanisms for measuring the success of the program identified. A methodology based on the work of Karl Albrecht and developed further by the project consultants, Austin Thompson and Associates, has been used. The project has been successful in identifying Library priorities and involving staff in an ongoing planning and quality improvement process.
Sunil Babbar, (1995)\textsuperscript{6} has explained that in “Applying total quality management to educational Instruction” shapes the long-term prosperity and wellbeing of both nations and their people. The vast resources that governments allocate to this sector of the economy make it imperative for those who manage education to ensure that education is effectively imparted in schools, universities and institutions of learning. Administrators and educators are constantly looking for ways to make educational instruction more effective and meaningful. We teach to educate people and, where people are involved, fundamental managerial concepts such as commitment, motivation, participation, and leadership play an important role in determining the effectiveness of processes used to shape and influence them.

Danuta A. Nitecki, (1996)\textsuperscript{7}, elaborated the implications for library management and future explorations of a tool applicable to academic libraries in Changing the Concept and Measure of Service Quality in Academic Libraries. New ways to evaluate libraries are needed. The SERVQUAL is a diagnostic tool to measure service quality, defined as the difference between customer perceptions and expectations of service. The SERVQUAL has evolved as an instrument to measure service quality and what customers value as important. The purpose of the study reported here was to explore the applicability of that instrument to academic libraries. This article discusses the study’s intent-to change the concept of library service quality change.

Sarah M. Prichard (1996)\textsuperscript{8} explains that Determining Quality in Academic Libraries Summarizes the attempts to define and measure quality and effectiveness in academic libraries, from traditional evaluative studies to Total Quality Management (TQM) and new research on user defined functions. Focusing on the organizational
analysis of the library as a whole and the contribution makes to the university or college, the article outlines a number of fundamental concepts and tools common to models of evaluation. Attention is given to assessment in higher education as a whole and ways in which determinants of library quality must be linked to educational outcomes.

Brian Quinn, (1997) enumerated that Adapting Service Quality Concepts to Academic Libraries some of the limitations and possibilities of the service quality model for academic libraries are discussed. The model was originally developed in a commercial environment and may require some adaptation to the noncommercial environment of the academic library. Various ways in which the model might be adapted are suggested. More traditional measures of academic library quality such as collection size are considered to be of secondary importance. In this article author has tried to point out some of the limitations and suggest some of the possibilities of the service quality model especially for academic libraries. The limitation is that the fact service quality model was originally developed for use in a commercial environment. This does not mean that the model is not without utility for the non-commercial environment of the academic library.

Viljoen, J.H (1997) explains that Total Quality Management in Libraries: Fad or fact by The present circumstances in libraries and the changes that are taking place arising from present Uncertainty are discussed. Some of these changes are brought about by the changing environment., the ever increasing demands of users, the fast growth and influence of information technology as well as certain external factors, for example the declining buying power of the rand. Libraries as service organizations are very conscious
of all these influences. The possible use of Total Quality Management and the application of Deming’s 14 points model in solving some these problems are also discussed.

**Vicki Coleman, Yi (Daniel) Xiao, Linda Bair and Bill Chollett, (1997)** Authors have discussed in their study Toward a TQM Paradigm: Using SERVQUAL to Measure Library Service Quality by A study has been conducted to measure service quality. The devised instrument is based on SERVQUAL, a service quality survey created by Leonard L.Berry.A.Parasuraman and Valarie. It measures the service quality in five dimensions: tangibles, reliability, responsiveness, assurance and empathy. Survey results showed a discrepancy in the quality of the services provided by the library and those desired by its customers.

**Zahiruddin Khurshid, (1997)** Discusses the possible application of various TQM tools in cataloguing operations. The application of TQM in cataloguing Total Quality Management (TQM) was initially applied as a management philosophy in the manufacturing sector. Following its enormous success, this philosophy is being applied increasingly in the service sector, including libraries. A review of the literature reveals that many theoretical concepts of TQM in relation to libraries have evolved during the last five to six years. However, their focus has almost entirely been on either general library management or library services. Focuses on the methods libraries have adopted to identify user needs and to improve services to meet user needs. Many of these methods either are based on the TQM philosophy or can be adapted.

**Ana Reyes Pacios Lozano, (1997)** has analyzed the ISO 9000 and the total quality management Models. Some units of information attempt to define their quality by projecting a positive answer to the expectations of the customers that constitute its
target market. To do this they put emphasis on customer satisfaction and on continuous improvement. Establishes the most outstanding differences between the ISO 9000 norms and total quality management as forms or manners of managing quality used in some information services.

**Mr. Chandrakant Chavan, T (1999)** has analysed in his article Total Quality Management: An Overview in Libraries and Information Centers about the TQM in libraries in an overview. TQM provides the tools and the direction to improve quality. The value added service can only be achieved by implementing TQM principles in library and information centers. For implementation and achieving total quality for the system the library executives have to understand the core concepts of TQM. This paper discusses the evaluation principles, stages of TQM. It points out the difference between traditional organization and TQM organization. It also discusses the implementation of TQM in libraries.

**Miguel Duarte Barrionuevo and Aurora Marquez Pérez, (1999)** elaborated Assessment of academic libraries in Andalusia (southern Spain): an EFQM-compliance guide A project has developed to operate at the regional level, for the assessment of the Andalusian University Library System. Led by the Andalusian Universities Quality Unit (UCUA), it will be implemented by a group of librarians from different Andalusian Universities. The project team has drawn up the Self-Assessment Guide, based on the EFQM Excellence Model. This paper undertakes to describe the steps followed in the preparation of, and the issues dealt with by, the Self-Assessment Guide. Its purpose is to facilitate the work of the assessors, to help highlight the strengths of the libraries assessed.
and to provide sufficient contrasting information to enable weaknesses to be pinpointed and improvement actions to be proposed.

**Vasiliki Kokkori, (1999)**\(^{16}\) author has explained that the TQM IN GREECE: The Case Study of An Academic Library. Academic libraries are a powerful tool for education and research. The library's significance in the university has been underlined by all studies because it takes part directly and effectively in institution's life. The historical, cultural and educational environment affects library development in general and university libraries in particular. The history of the Greek academic libraries starts since 1837 with the establishment of the first university in Greece. Author explained about the basic TQM principles. The TQM is not a 'quick fix' procedure and requires a long-term commitment by Library managers.

**Pao-Nuan Hsies, Pao-Long Change, (2000)**\(^{17}\) has defined that the Quality Management Approaches in Libraries and Information Services by Explains that several libraries and information services have adopted quality management practices in recent years. Among the various initiatives implemented include ISO 9000 standards, 5S movement and benchmarking. By adopting quality management, the library’s image and service quality can be improved, and librarians can increase productivity while focusing on the customer’s needs.

**Eleni Adamantidou and Roula Kouri, (2000)**\(^{18}\) enumerated that Efforts of Implementing TQM in the Central Library of The National Technical University, Athens Explains about the TQM Principles such as Participating Management, Personal training and responsible service to customers in the library. A first step which is necessary for a library, is to define which approach in the procedure of change is more appropriate for
itself, considering the size, the environments and the conditions of function that apply in this library. The method of TQM represents a new age in the management of an organization. Many libraries have embarked on plans for implementing quality-related philosophies such as TQM. It is well known that TQM is a management method, that libraries can benefit from it in several ways.

**Danuta A. Nitecki, (2000)** defines that Changing the Concept and Measure of Service Quality in Academic Libraries New ways to evaluate libraries are needed. The SERVQUAL is a diagnostic tool to measure service quality, defined as the difference between customer perceptions and expectations of service. This article discusses implications for library management and future explorations of a tool applicable to academic libraries.

**Ghana by Anaba Alemna, A (2001)** has analysed The Need for Marketing and Total Quality Management Strategies in Libraries in The importance of Marketing and Total Quality Management in libraries were explained. It has now been realized that marketing information services and products is essential for all information providers if they are to continue to exist. This is largely because information has become a very valuable resource in recent times comparable to traditional resources such as land, capital, and labor. Over the years, libraries in Ghana have been performing the traditional role of identifying, storing and disseminating information to a relatively small number of users. In recent years things are gradually changing. In all types of libraries the number of users are increasing.

**Danuta A. Nitecki and Peter Hernon, (2001)** have analysed Measuring Service Quality at Yale University’s Libraries Examines a new approach to measuring
service quality, one that produces findings useful for local planning and decision making. It also differentiates between service quality and satisfaction and points the direction for further research. The survey form and approach presented in this article merit continued examination, especially because the findings have clear implications to library planning and decision making. Individual libraries can review and modify the service attributes and produce an instrument for their local customer input. The staff, it is hoped, becomes more customers or readers focused and more fully grasp how each unit of the library contributes to the overall quality of service provided.

Verma R, K, (2002) has discussed about Measuring Quality Management Level with reference to ISO 9000 and TQM for Special Libraries in India. The important six factors viz., Status of library, Size of LIS units, Sector of organization (administrative control), Type of organization, Resources, and Quality awareness level on Quality Management Level of Special libraries in India were discussed and the result showed that proper performance measurement of LIS sector QML should depend upon a TQM oriented instrument since the scope of ISO 9000 measures are too narrow and cannot be applied directly.

Julia C. Blixrud, (2002) has discussed Evaluating Library Service Quality Use of LibQUAL+ To measure library services a tool called LibQUAL++a specially emerging standardized measure of library service quality across institutional library contexts. It is adapted from an instrument called SERVQUAL (for SERVice QUALity), which is grounded in the "Gap Theory of Service Quality" developed by the marketing research team of A. Parasuraman, V.A. Zeithaml, and L.L. Berry. This tool allows a web-based method of administration and analysis and eases the burden of administration
locally, creating a scalable and replicable protocol. It also makes readily available large normative data on user perceptions and expectations of library service quality.

**Anne Martensen and Lars Grnhold, (2003)** have analysed Improving Library Users' Perceived Quality, Satisfaction and Loyalty: An Integrated Measurement and Management System This article describes the development and application of a structural equation model which allows librarians to quantitatively measure library users' perceived quality, satisfaction and loyalty with a library as well as the degree to which specific elements of a library's services, collections and environment contribute to those perceptions. The article reports the results of a survey among users at five Danish libraries with particular attention to the Copenhagen Business School Library.

**Siraj Nissa Begum, (2003)** Author has analysed about the Total Quality Management in the Academic Library Needs of the customer (user), satisfaction for the customer and the services offered to the customers for their utility and application of quality standard like ISO 9000 series and the roles played by the library staff in respect to users services etc., were discussed.

**Rajashekhar D.Kumbar, (2004)** has discussed about The Importance of Marketing and Total Quality Management by Marketing and Total Quality Management are closely interlinked. Marketing focuses on capturing and analyzing customer’s needs; TQM involves the question of whether products and services do correspond to customer’s expectations and needs and whether both are congruent with each other. TQM has been defined as systematic processes which focus on understanding customer needs and improving customer services. The implementation of TQM in the Library is a useful way to evaluate the quality of library services and provide goals for improvement. One
especially beneficial aspect of TQM is its emphasis on continuous improvement. The most important condition of effective library services is to support continuous enriching dialog between the library and society by agreeing upon quality targets, which relate to the maintenance or improvement of quality standards.

**Manjunatha, K, (2004)** Author briefly explain the concept of service quality; trace its development and highlight some of the results of an empirical study on service quality in academic libraries is presented. Customer’s Perception of Service Quality in Libraries Service quality assesses performance of products and services from customers' perspective. A library has both tangible products and intangible services. Assessing Service quality as management technique is of recent origin and new to Library and Information Science (LIS) professionals. Today, the library customers are open to multiple sources of information and expect quality material within shortest possible time irrespective of the format of information. Proper understanding of customers' perceptions along service quality dimensions is essential for LIS professionals to recognize the customer expectations.

**Perpetua S. Dadzie, (2004)** has discussed Quality management initiatives in Balme Library: possibilities, challenges and constraints for top management commitment. The study stressed the important role of top management in an organization and examined the possibilities, challenges and constrains posed to librarians in the provision of quality service to the university community. Using a case study approach, the study concluded that top management were fairly committed but were too financially handicapped to fulfill all the strategies and policies outlined.
Yang Ling-yun, ZHU Hai-kang (2005)\textsuperscript{29} has analysed in his article An experiment on digital library based on the method of TQM system. Principles and methods of TQM were applied to digital library management. TQM puts emphasis on process and continual improvement. The TQM theories and measures explained clearly in this paper were the scientific tools used in the experiment in the Wenzhou University Digital Library. This paper deals with a very broad range of subjects related to a digital library; system model of TQM for digital library, organization structure, and tasks of Wenzhou University Digital Library, task flow chart of electronic reading room, cause and effect of electronic reading room quality management, systematic model of enhancing electronic information acquisition rate, quality comparison of electronic reading room service, etc.,

Hadi Mohammad Pour, K. Yeshodhara, (2005)\textsuperscript{30} have analysed Total Quality Management (TQM) in Education-Perception of Secondary School Teachers. Present the perception of secondary school teachers in Mysore city (India) regarding Total Quality Management (TQM) in education. It is an attempt to understand how these perceptions vary by demographic variable such as, gender & subject specialization (Arts and Sciences). Data were collected from 156 high school teachers in Mysore (India) on the Bonstingle’s conceptualization of Demming’s 14 points Total Quality Management (TQM) in Education (1992) and were analyzed using SPSS version 14.0. Analysis of Variance (ANOVA) was employed to find out the significance of difference between variables subscales. Significant difference was found between male and female teachers in the perception of total quality management. Female teachers had higher mean score
than male teachers. There is no significant difference between Arts and Sciences secondary school teachers in the perception of TQM in education.

Ewa Glowacka, (2005) explains that An Introduction into Quality Assurance and Total Quality Management with Reference to library and information institutions by Libraries and information institutions use various methods and procedures to achieve a goal which is the application of total management strategy. Every library and information institution tailors the guiding principles of quality systems to its specific needs and conditions of functioning. There is a growing conviction that library and information institutions should find an optimal relation between TQM and ISO 9000 if they want to implement the total quality management system. Implementing both systems at the same time means constant quest for improvements; TQM stands for innovation and culture, whereas ISO 9000 means consolidation and discipline. The application of the ISO 9000 series of standards provides a solid basis for implementing TQM.

Amruth Sherikar, Suresh Jange and S.L. Sangam, (2006) have analysed Performance Measurement of Quality Services in Academic and Research Libraries in India. Explains that the quality dimensions in the light of SERVQUAL viz., Reliability, Responsiveness, Assurance, Access, Communication, Tangibles, Empathy and Security have been applied and the results indicate that the service quality dimensions of reliability, responsiveness, assurance, access, communication and tangibles applied to university libraries in Karnataka are found to be satisfactory to a little extent based on the scale techniques. The study suggests several areas for future research and for collaboration among library managers, educational administrators, scholars and measurement theorists towards improving the performance of library and information
system in India to meet the high standards of service quality in libraries to serve the users with utmost care and diligence.

Keith M. Cottam (1994), “Directors of Large Libraries: Roles, Functions, and Activities”, explains about the experience and trends in the roles, functions, and activities of today’s directors of large libraries or library systems. They assume an extensive range of complex responsibilities in their unique positions, foremost of which is accountability for internal organization, operations, and management.

Hong Wang, (2006) discussed From “user” to “customer”: TQM in academic libraries. Author explains that the purpose of this paper is to provide a retrospective overview of total quality management (TQM) in the context of library services. This paper presents a study of TQM and a comparative analysis of TQM in the library context. Studies of both theoretical principles and experimental implementations demonstrate that it is worthwhile to introduce TQM to the academic libraries. The process of implementing TQM in libraries involves a conceptual change in library professionals and a cultural transformation in the organizational operations. Without a long-term thinking and commitment, it is not applicable. Teamwork is important for successful implementation of TQM. Every step of the process depends upon the constant support of the top management.

Suzanna H. Angel and Leslie, G. Mackler, (2007) explains about the A Benchmark instrument tested in women’s hospital libraries. Explains that due to changing in health care environment it is increasingly important to evaluate and improve the quality of library services. This paper describes a benchmarking effort by a women's
hospital library and a prototypic benchmark instrument developed for hospital library collections and service performance.

Pauline Nicholas, (2007)\(^{36}\) has analysed Benchmarking, an Imperative for Special Libraries in the Caribbean: The Jamaican Case. Benchmarking, a total quality management tool rarely used in the Caribbean allows librarians to measure work processes or procedure in the library. It also guides in the provision of accurate and uniform information that can be used to convince the government or the funding agencies that the funds or budget allocation is being used effectively. It ensures that libraries and librarians will also remain on the cutting edge of the profession, improve their efficiency effectiveness and competitiveness. Benchmarking calls for proper evaluation of library services which is also supported by Ranganathan’s Five Laws of Library Science. Client satisfaction, collections and usage and strategic alignment are three standard categories of measurement used in evaluating libraries services.

Golnesa Galyani Moghaddam, and Mostafa Moballeghi, (2008)\(^{37}\) has discussed that the Total quality management in library and information sectors An overview of TQM concepts was carried out. Focusing on TQM implementation in the library and information sectors, the experiences of libraries adopting this method are also suggested. TQM was initially applied as a management philosophy in the manufacturing sector. Following its enormous success, this philosophy is increasingly being applied in the service sector including libraries. This paper provides a useful overview of TQM implementation in the library and information sectors.

Frankie Wilson, (2008)\(^{38}\) has discussed Benchmarking and library quality maturity. There is still much research to be done, but a tentative conclusion can be drawn
that benchmarking should be viewed as a tool for organisations at a high level of quality maturity. When used appropriately it can have real and long-lasting benefits, particularly in driving a culture of continuous improvement. When used inappropriately it is a waste of time and effort.

**Jyotimoy Dash, (2008)**\(^{39}\) has explained in the article Total Quality Management in Libraries – A Perspective Approach by Highlights about the importance of total quality management in libraries. It is a view that the condition which challenged in libraries of Total Quality Management is very much prevalent here. It is not, however, clear if library managers are effecting the necessary changes to satisfy their clients. It is time for libraries to exhibit that they are valuable to the continued survival and sustenance of their organizations. This can be done best by activity management. Therefore, it is a system of continuous improvement employing participative management centered on the needs of customers. Further this paper explains that the key components of TQM are employee involvement and training, problem solving teams, statistical methods, long term goals and thinking and recognition that system, not people products inefficiencies.

**Mayri Duggirala, Chandrasekharan Rajendran and Anantharaman, R, N, (2008)**\(^{40}\) have discussed in the article Provider-perceived dimensions of total quality management in health care by Highlights the key dimensions of provider-perceived total quality management (TQM in the healthcare in India. Further, the impact of the dimensions of provider perceived TQM on hospital performance is examined. A questionnaire has been developed by the author based on an extensive literature review of research in service quality and based on responses of the plot survey among medical professionals. The instrument thus developed has been examined for its psychometric
properties using tests of reliability and validity. Multiple regression analysis has been used to examine the impact of the dimensions of provider-perceived TQM on hospital performance.

Dr. Chinnaswamy and Rajashekar D. Kumbar, (2008)\textsuperscript{41} analysed about Towards Quality Culture in Library Management System: A Comparative study of engineering colleges in Goa by Total Quality Management is recognized as an important management philosophy which is being used in most of the disciplines and the Library and Information Centre is not exception of it. The author explained about the study carried to understand the existing level of management system towards approach and use of library resources by the users. Separate questionnaire for librarian and users’ were prepared. Questionnaire base survey was conducted to collect the data towards approach and use of information resources in engineering colleges. The study revealed that the response of all the college users is moreover same towards approach and user of information resources. Libraries are needed to implement more information technology applications to provide quality information services.

Maurice B. Line, (2008)\textsuperscript{42} discussed regarding Relating Quality Management to Strategic Planning Explains about TQM is following strategic planning (SP) as a process used in libraries. TQM is aiming to provide user driven service that is timely appropriate and free of error involves a set of techniques for the analysis of operations. Characteristics that Strategic planning and Total Quality Management have in common include systematic approach, commitment or involvement of all staff, a focus on users and improvement. Strategic planning and Total Quality Management are complementary, but it is difficult to do them concurrently. While strategic plan with a
mission and objectives should be in place before TQM is implemented over the whole library, it may be useful for some TQM exercises to be carried out before planning starts.

**Pal Pandi, Surya Rao and Jeyathilagar, (2009)** have analysed A Study on Integrated Total Quality Management Practices-Technical Institutions-Student’s perspectives by Explains that in the developed countries like Japan, USA and UK the TQM have been successfully adopted in the higher education. In India, leading Technical institutions like IITs are practicing the TQM philosophy. TQM has become the most important concept because the quality of the student makes the difference between success and failure of any institution. The purpose of this paper is to study the Integrated Total Quality Management practices in selected technical institutions in Tamilnadu, India and also to investigate the performance level of the institutions through student perceptions.

**S.D.Vyas in the article, (2009)** discussed that the Best Practices in Academic Libraries in India: A Study by UGC’s data about universities, colleges, teachers and students which have grown over a period of last 58 years, It defines best practices as an application of procedures to yield superior results which means way of doing things in particular organization as guidelines for good practices. Explains NAAC’s concern for quality of library practices as well as NAAC’s set of best practices in academic libraries. The paper provides a few examples of the best practices experienced in libraries in different scientists like Dr.S.R.Ranganathan and others

**Fahimeh Babalhavaeji, Alireza Isfandyari-Moghaddam, Seyed Vahid Aqili and Ali Shakooi, (2009)**, have explained Quality assessment of academic library performance: the case of an Iranian academic library The present research aims to assess
the performance of libraries at the Islamic Azad University, Sciences and Research Branch (IAUSRB) through gap analysis. To do this, a researcher-developed questionnaire which is based on available standards and quality assessment tools including ACRL standards, LibQUAL and ISO 11620, and some criteria included in the related literature was designed and distributed among users of IAUSRB libraries. Five service quality categories, were included in the questionnaire: "Environment, equipment and physical facilities", "Public services”, “on-book materials", "Staff (librarians and their co-workers)", and "Information literacy and user education". Based on research findings, the most expected library services prioritized by users are" operation time", "staff" , and "circulation" ,while the least expected library services which are of lower importance from users' perspective are "press" and "audiovisual materials" The findings also indicate that services offered by the libraries surveyed had a relatively quality performance and average success.

Thanuskodi, (2010) in his research article has discussed about the Application of Total Quality Management in the Academic Library. Suggests that the students are demanding quality service for their monies worth. The managers of quality must have an intention to assess the product: sound knowledge of the products features and characteristics; customer preferences and resources. All academic library staff must receive training, including skill training; on the job guidance; retraining. Well trained staff is the competitive weapon for better quality service in an academic library. The successful personnel management includes the following: Job Analysis, Job Evaluation, Staffing, Recruitment and Selection, Tests, etc.
Keng-Boon Ooi (2009) elaborated TQM and Knowledge Management: Literature review and proposed framework. This research study seeks to come up with a conceptual framework that investigates the different dimensions of total quality management and its effects on knowledge management. This is to help build a theoretical framework of TQNM and its dimensions, which mainly consists of leadership, strategic planning, information and analysis, process management, human resource focus and customer focus.

Christopher Millson –Martula and Vanaja Menon, (2009) explain about Customer expectations: Concepts and Reality for Academic Library Services. The academic libraries continue evolve as service organizations, they should focus on their users as customers and develop programs of service that meet or exceed user expectations. The ultimate aim is for the customer satisfaction. Further this article deals with the elements that determine expectations as well as the existing gaps that relate to customer expectations and service performance. Possible strategies for narrowing these gaps include enhanced communication between the library and its customers and improved management.

Mahesh Chandra Guru, B, P, Gopalaswamy, M Jerry Arun and Padmamma, S, (2009) discussed about Academic Library Management in India: Challenges and Opportunities. The academic libraries have to be managed on the basis of constant introspection at the individual level and scientific evaluation at the institutional level in this age of knowledge management. Redefining roles and responsibilities, constructive intervention of the organization leaders in institution building endeavors, positive involvement of information personnel in delivery system
and constant evaluation of goods and services will make the Indian academic libraries highly appropriate and resourceful in future.

Liu Mean-Shen, (2009) has done an analysis regarding Refined and Integrated Kano Model and the Implementation of Quality Function Deployment-Research on the Library of a Vocational and Technical School in Taiwan. Recent education thought is the idea pursuing improvement and improving quality. The main purposes of universities and colleges libraries are to facilitate education, research and service to improve the general research and development ability. Thus, the ways that libraries offer more efficient service have significant influences on rising reputation and maintaining sustainable development. The evaluation on the achievements of libraries is major on reader service aiming at improving service quality. By the combined methods of integrated Kano model and Quality Function Deployment (QFD), the research focuses on the service quality of a library of a vocational and technical school in Southern Taiwan. The results show that finances, plenty of staff and professional ability and technology are the key quality technologies carried out beforehand to improve service quality of the library of the vocational and technical school. Besides, the difference index shows that the greatest differences between importance and satisfaction are in the following perspectives: good application environment (for example: atmosphere, cleanliness and quiet), easy to be operated and offer query function on personal records of lending and convenience for obtaining books from shelves. The improvements of service quality should underline these three aspects from the perspective of differences between importance and satisfaction.
Núria Balagué and Jarmo Saarti, (2009) have explained about Benchmarking quality systems in two European academic Libraries. Purpose – The purpose of the paper is to benchmark two ISO 9001:2000 based quality management. Design/methodology/approach – The paper is a case study in which both libraries’ approach to the building of their quality management system are compared. Findings – The ISO 9001:2000 guides institutions so that they will develop their quality management systems along similar lines. Both libraries have devised the same kinds of solutions to the key points of the standard and it has helped them to develop their services and analyze how they have succeeded in this task. Research limitations/implications – The paper is based on the experiences of two libraries. Practical implications – The paper gives examples for the implementation of the ISO 9001:2000 quality standard inside an academic library. The paper provides ideas on how a quality system is best developed. ISO 9001 is one of the possible ways to manage quality in an organization, though is not the only possibility. In developing their quality management systems, organizations can use a variety of approaches. Most, however, have certain common themes, i.e. they attempt to allow an organization to perform a proper deployment of the principles of total quality management. The basic principles behind the present QM systems e.g. EFQM, balanced scorecard, ISO 9001 – are actually rather similar.

Vinod Kumar, (2009) enumerated the Management of service quality in agricultural university libraries. Librarians in the present age find themselves in a position where they may not be satisfied with the traditional orientation of offering books and periodicals but where they also have to consider their target users. With the advent of new communication technologies, globalization of supply, competitive and professional
environment, unending and unlimited informational expectations of the users from the library have forced the libraries, including the agricultural university libraries to manage the library operations in order to provide quality library services. Discussed the concept of quality and its application in the library. The present study involves the concept of measuring service quality and how the SERVQUAL model can be helpful in measuring the service quality of library. Discusses the views of agricultural university librarians in managing the library service quality services. It is observed that the Librarians in the agricultural university libraries are managing quality of their library to the great extent.

S R. Raman Nair, (2009) explained about sustainable Management of Library and Management Systems in Agricultural Universities. Importance of Library and Information Systems in agricultural education, research and development. Points out challenges offered to library executives by information explosion, developments in computer and communication technology and information awareness have been discussed. They have to totally recast and made more productive to the needs by application of modern management techniques. Discussed about the concept of library management, total quality management and automated library management and systems. /further stresses that the success of the library system depends on how appropriately it could conceive the agricultural university’s information requirements and develop appropriate strategies for providing effective information.

Yong Kin, Eun Jeong Kim and Min Gyo Chung, (2010) have discussed A Six Sigma-based method to renovate information services. Focusing on information acquisition process by identifies 12 key factors, which have a great effect on information
acquisition time and information utilization, and then proposes the improvement plans for those identified factors.

Dheeraj Mehrotra (2010) have analysed Applying Total Quality Management in Academics. The Deming’s 14 principles and outlines the TQM principles and believes that are most salient to education reform and he calls it as Four pillars of TQM.

Dinesh K. Gupta and Kavitha Bhardwaj, (2010) discusses about Library Management research in Indian Universities. The research databases were studies and literatures and finds that the research work has been carried out by the Information professionals for more than three decades and 167 research work has been taken into consideration and arrived a conclusion that it has carried out on various parameters and concludes that there is a rising interest in research in the area of library management.

M. Hassanzadeh, (and) Rezaei Sharifabadi, S, (2010) have analysed Assessment of Service Quality at Central Library of Management and Planning Organization (MPO), Iran By Examines the quality of services at Iran’s Central Library of Management and Planning Organization (MPO) from the viewpoint of its users. The research was conducted in two phases: First, the library and its services were compared to the Standards for Special Libraries published by the National Library of Iran (NLI). The library was found to meet most of the standards. Second, the quality of service provided by the library at expected and observed levels was examined from the viewpoint of organizational and non-organizational members using a modified version of the SERVQUAL questionnaire. Findings showed a significant was difference between two (expected and observed) levels, meaning that users’ expectations have not been met. The most significant difference related to “appropriate collection of information resources”.
The results also showed there was no significant difference between organizational and non-organizational users’ opinions about the quality of services. Findings also showed that “relevant information services” was the priority of user groups-users emphasized the need for timely and accurate information. There was a correlation between the rate at which the library conformed to the national standards and users’ expectations of quality.

Ujvala Sudhir Ulhe (Gawande)  and Prof. S. K. Patil, (2010) have discussed about the Application of Six Sigma Concept in University Libraries, a Key to Success: A case study of Jayakar Library, University of Pune (India) The Six Sigma applications in the academic libraries especially University libraries were elaborately discussed. Libraries are trying to satisfy the needs of the readers however no users are fully satisfied with the services provided by library. Six Sigma is a powerful method to find out gaps and shortcomings of the system and provide scope for improvement. In the changing environment, companies constantly look for new ways to improve their business processes, and satisfy the customers’ wants and needs. Six Sigma is the most powerful statistical tool that enables organizations to considerably increase profits by restructuring the operations and remove the defects or mistakes in the processes involved in it. Library is an effective source of information to be shared by people of all kinds. Six Sigma systems have relationship with customers and financial constituents. Six Sigma is a journey for those who are truly committed to improving the quality and meeting customer needs as well as driving human development to new levels. It is not an opportunity but a responsibility of every person in implementing and sustaining this strategy that will improve the culture in their organization.
Petros Kostagiolas, (2011) has analysed Information Services for Supporting Quality Management in healthcare. The role of information services in supporting quality management in healthcare is considered. The importance of information to quality in healthcare is examined and an analysis of the role of the international standard ISO 9001:2000 in supporting data, information and knowledge management is conducted. A framework is presented for quality management in healthcare through the support of information services.

Yen-Ting Chen and Tsung-Yu Chou, (2011) have enumerated Applying GRA and QFD to Improve Library service Quality. Applied Grey Relational Analysis (GRA) to Quality Function Deployment (QFD) to identify service improvement techniques for an academic library. First, reader needs and their importance, and satisfaction degrees were examined via questionnaires. Second, the service improvement techniques for satisfying the reader needs were developed by interviewing experts. Following, a relation matrix was constructed by GRA. The empirical study specifies top 5 reader seeds and service improvement techniques respectively, and some practical suggestions are raised for academic libraries. The author explains about the GRA QFD model to facilitate the design of service quality improvement techniques based on readers' needs. In the research process, we obtained the gap between the importance and satisfaction of service quality. By the cognitive importance and satisfaction gap, the result of GRA QFD model will be more available and closer to readers' needs.

Agarwal P.K., Pradeep Kumar, Gupta Swati and Tyagi, A, K, (2011) discussed about the Implementing total Quality Management in Professional Educational Institutes in India. One of the emerging philosophies in quality and management
concepts is Total Quality Management. It is a management strategy which is aimed to embed quality awareness in all the organizational processes. Principles of Total Quality Management (TQM) have been successfully adopted and applied in the field of professional education by developed countries such as Japan, USA and UK. In India, TQM has been successfully implemented in some Professional Education Institutions (HEIs) and it has improved the quality of professional education in those institutions. TQM has become the most important concept because the quality of the student makes the difference between success and failure of any institution. TQM can serve as a paradigm for improving every aspect of collegiate functioning from fiscal administration to classroom instruction. Total Quality Management (TQM) is inevitably common factor that will shape the strategies of professional Educational institutions.

Pan Juying, (2011) has discussed Operation of Service Quality System in Academic Libraries: This paper presents the operation of service quality system, taking Wuhan University of Technology Library (WHUTL) as example and proposes that enhancing Total Quality Management in the academic library is the way out of improving service quality. Discusses in detail the implication of Total Quality Management, the development of quality system documentation, the implementation of service quality system and the auditing mechanism of quality system, etc.

Sivakala and Thulasi Kavitha Yadav, S, (2012) have explained Total Quality Management in Academic Libraries: A Study by Analyses and evaluate the TQM in Academic Libraries with a view of exposure of library professionals. It aims to highlight the problems encountered by the professionals and suggests some measures for its improvements. Author used various statistical methods have been used for data analysis.
Paul Burden(2012)\textsuperscript{64} enumerated the Total Quality Management in The Library by TQM is not normally thought of in terms of the library; it certainly can be used to increase patron and employee satisfaction. TQM can be used in any area in which an organization wants to improve. The scope in this paper is the use of TQM techniques in three library groups in attempts to improve service to its patrons (customers) through the solicitation of users opinions and how five of Deming ‘s 14 points can be used to offset any staff concerns.

Sudesh N. Dongare(2012)\textsuperscript{65} discussed the Total Quality Management in Library by TQM is a management approach centered on quality, based on the participation of an organization’s and aiming at long term success. This is achieved through customer satisfaction and benefits of all members of the organization and society. TQM is a management philosophy for managing an organization in a way which enables it to meet stakeholder needs and expectations efficiently and effectively, without compromising ethical values.

Dr. Vikram U. Dahifale, (2012)\textsuperscript{66} defines that the Total Quality Management in College Libraries: An Overview by in the last couple of years there is mesmerizing changes in libraries. Effectively implementing quality management in libraries requires an understanding of applying appropriate quality management concepts and techniques. Nowadays, electronic resources, networks and the World Wide Web represent a large portion of the library services. In this competitive educational environment, most of kudos institutions in India are thriving to establish reputation by way of imparting quality educations. It is this context that the study of Total Quality Management of library becomes crucial.
Stefanos Stavridis, (2012) discussed about EFQM in Academic Libraries: the application of a Quality Management Model at the University of Cyprus Library. The Quality management were discussed and it further states that it is fundamental for any organization. Among the various management tools that exist, EFQM seems to be very appropriate for libraries, as it proves a strong basis for an integrated approach, it can act as an umbrella for additional management tools, an promotes continuous improvement.

Manoj Kulkarni and Neela J.Deshpande, (2012) have analysed Empowering Library Users, Establishing Channel of Communication for Service Quality Expectations of Trainers from Govt.Administrative Training Institute Libraries in India The importance of about the librarianship and value added services and satisfaction of the library users for any library have been elaborately discussed. To satisfy any library users it is necessary to establish dialogue with them and find their expectations. The proper channel of communication with the user’s needs to establish and participate them in library management empowers the users. It helps the library manager to enhance use of the library.

Sribatsa Pradhan, (2012) has defined Total Quality Management in Academic Libraries by The Total Quality Management principles were discussed further the author explains that TQM acts as a management tool which systematically looms to take powerful internal and external customer orientation. This paper deals with the academic libraries and aims to focus on how they can provide better quality products and services to stake holders. Since continuous change is occurring in the field of library and information services, academic libraries have to offer learning materials in all format, i.e print (books and journals) as well as electronic medium (through digital networked information services). Attempt has been made in this paper to analyses how academic
libraries with limited resources can provide quality services to their customers, with TQM as an effective management tool.

**Brian A. Quinn, (2012)** enumerated about Adapting Service Quality Concepts to Academic Libraries, This study has tried to point out some of the limitations and suggest some of the possibilities of the service quality model for academic libraries and represents an initial attempt at suggesting how the two models might be merged, Some possible ways in which the service quality model might be adapted to various areas within the academic library have been discussed. Other areas of the library besides reference services can benefit from adapting service quality concepts as well. The collection can be made more responsive to local user needs through the judicious use of user studies that strengthen the collection in heavily used areas but never at the expense of neglecting those areas that are less in demands. Making the physical environment of the library appear more like a store and less like a warehouse may be as important as good customer relations in helping the customer appreciate the value of the library and its contents.

**Prof. Dr. Petra Düren, (2012)** has elaborated Total Quality Management in Academic Libraries – Best Practices The Quality Management is one of the management challenges in libraries. The quality of the service provided makes the difference between academic libraries and other information service providers. There are a variety of quality management projects – mainly in public libraries in Germany of which some will be introduced in this paper. Best practices in two academic libraries reveal how Total Quality Management (TQM) can be implemented and established in the day-to-day management of libraries successfully. A modern leadership style – for example the
transformational leadership – is required for the implementation of Quality Management in a library becoming an effective strategic goal and a management philosophy.

Deepak Khera and Shiv Narain Sharma, (2012) TQM: An Over View in Academic Libraries Authours explained that the Total Quality Management (TQM) has been the focus of much attention in management literature in recent years. There has been a steady increase in the amount of material dealing with its application to the service sector but very little that relates to application of TQM to libraries. This paper discusses the different issues relating to TQM and its implication on in the field of library science.

Margaret Robertson and Isabella Trahn, (2012) have discussed about Benchmarking academic libraries: an Australian case study. Experience and outcomes from the point of view of the benchmarking proposer and the partner were discussed. Benchmarking places great demands on staff at both proposer and partner organizations to understand concepts and process and to provide information; an organizational framework is desirable for both proposer and partner. Questionnaire outlines are presented. Great care in interpreting information is necessary. The use of common output and performance measures facilitates benchmarking and continued development of these by academic libraries is essential for it to be a useful tool for process improvement.

Manisha S. Sutar, (2012) has explained that the Quality management is a concept to improve the services of library and information centers. Nowadays, electronic resources, networks and the World Wide Web represent a large portion of the library services. The librarians must manage staff, information in several supports, and technical activities to produce quality services. Quality services means resources and services, which satisfy users’ expectations and perceptions. It is very clear that librarians must use management tools to run
the library services. These tools such as TQM, SERVQUAL, LibQUAL help them to assess services, to make decisions, to improve services and to achieve a better quality.

Che Azlan Taib, Ari Warokka and Haim Hilman (2012) have explained that the establishment of a national Quality Assurance system focusing on the quality of the programs offered in terms of the general criteria of the structure and process of higher education and this paper aims to explore the efforts and other issues associated with the development and implementation of quality assurance in higher education due to its role as a service organization, which is required to enhance their quality of services. One of the important pillars determining the quality of higher-education service delivery is the library’s quality management system.

Pardeep Rattan and Dr.Payare Lal, (2012), have discussed about “Pros and Cons of Six Sigma: A Library Perspective” Authors have explained that the Six-Sigma aims to maximize user/customer satisfaction and minimize defects in products and services being offered by an organization. It is an attempt to critically evaluate the relevance of six sigma statistical thinking with a focus on library and information services. theoretical framework in attaining the quality services through the methodologies of DMAIC and DMDAV or DFSS of Six-sigma, tools used within Six-Sigma, pros and cons of Six- Sigma for library and information services’ management has been discussed at a length.
REFERENCES


5. **Doreen Parker, (1994)**, “Total quality service at the Victoria University of Technology library”,


Journal of Academic Librarianship, September 1997


16. **TQM IN GREECE: THE CASE STUDY OF AN ACADEMIC LIBRARY (1996)** Vasiliki Kokkori National Technical University of Athens


44

    possibilities, challenges and constraints for top management commitment”, Library
    Management Emerald, Vol. 25 Iss: 1 pp. 56 – 61

    System”, Journal of Zeng University Science, 6A(11), p.1362-1366

30. Hadi Mohammad Pour, K. Yeshodhara, (2005) have analysed Total Quality
    Management (TQM) in Education-Perception of Secondary School Teachers
    Service Quality in Higher Education, 2005

    Management with Reference to library and information institutions”

32. Amruth Sherikar, Suresh Jange and S.L. Sangam, (2006) have analysed
    Performance Measurement of Quality Services in Academic and Research Libraries
    in India, Asia-Pacific Conference on Library & Information Education &
    Practice, 2006

33. Keith M.Cottam (1994), Directors of Large Libraries: Roles, Functions, and
    Activities Library Trends, Vol. 43, No. 1, Summer 1994, pp. 15-33

    Library Management, Vol.27, No.9, pp.606-620


40. **Mayri Duggirala, Chandrasekharan Rajendran and Anantharaman, R, N, (2008)** “Provider-perceived dimensions of total quality management in health care”


42. **Maurice B. Line, (2008)** “Relating Quality Management to Strategic Planning”


45. **Fahimeh Babalhavaeji, Alireza Isfandyari-Moghaddam, Seyed Vahid Aqili and Ali Shakoori, (2009),** Quality assessment of academic library performance:


47. **Keng-Boon Ooi(2009)** “TQM and Knowledge Management: Literature review and proposed framework”


58. Ujvala Sudhir Ulhe (Gawande) and Prof. S. K. Patil, (2010) “Application of Six Sigma Concept in University Libraries, a Key to Success: A case study of Jayakar Library, University of Pune (India)” Six Sigma, 2010


74. **Manisha S.Sutar, Quality Management In Library Services Social Growth**

